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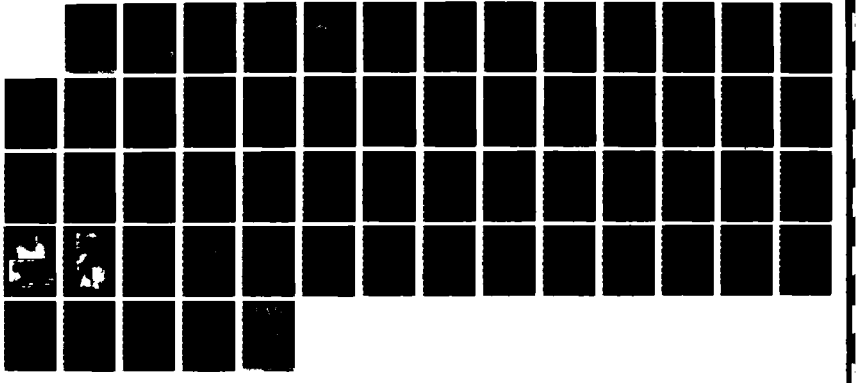

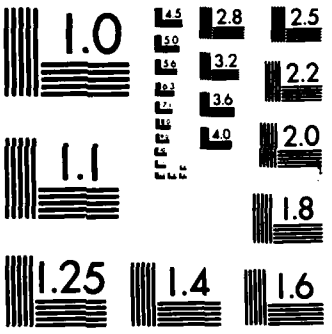

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Deception and the Operational Level of War

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In the years since WWII the subject of deception has recieved scant attention in the U.S. Army when compared to other subjects relating to warfighting. Consequently our doctrine for deception lags behind other developments, especially at the operational level of war. FM 100-5 emphasizes that an integral part of any campaign plan is a deception plan. With the resurgent emphasis on the operational level of war it is important that deception get a through review as an essential operational level combat multiplier distinct from tactical and strategic level deception operations.

The intent of this monograph is to identify some essential requirements for deception operations at the operational level and suggest some preliminary doctrinal imperatives for the use of deception in support of a campaign. To accomplish this three successful operational level deceptions from WWII are

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used: Sicily (Operation Husky), Ardennes (Wacht am Rhein) and Belorussia (Operation Bagration). This monograph contends that these three campaigns provide valuable lessons for the conduct of operational deception and are valuable in determining what the requirements and imperatives are for successful deception operations.

The monograph establishes that the operational level deception is indeed distinct from the tactical and strategic level deception due to the factors of time, space and resources available in large unit operations. Due to these factors of size and scope the operational level deception requires special attention in several areas: planning, intelligence support, security and resources. These areas are analyzed in light of the historical example to establish the actual nature of the activities that take place in each area. Following the analysis some doctrinal imperatives are suggested for deception operations at the operational level. The monograph also consider the implications of these findings for current doctrine, training, organiza and equipment.

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Introduction

> "All warfare is based on deception. Hence,when able to attack we must seem unable; when using our forces, we must seem inactive; when we are near we must make the enemy believe that we are away; when far away, we must make him believe we are near. Hold out baits to entice the enemy. Feign disorder, and crush him."
>
> Sun Tzu

Deception has been practiced by armies since the beginning of time. The use of deception on the battlefield through the years has taught us many lessons and that experience is as valid today as it was when the Greeks placed the Trojan Horse in front of the walls of Troy. A study of the great military campaigns of history illustrates what a great equalizer and combat multiplier a well conceived deception can be. In the words of Winston Churchill: "Nearly all the battles which are regarded as masterpieces of the military art.....have been battles of maneuver in which very often the enemy has found himself defeated by some.....swift, unexpected thrust or strategem."[1] Some of the "masterpieces" Churchill refers to can be found in the campaigns of World War II. The United States participated in numerous classic deception operations in that war and gained valuable experience concerning the major contribution deception operations can make in a campaign.

However, in the years since World War II the subject of deception has received scant attention in the U.S. Army when compared to other subjects relating to warfighting. Consequently there is no up-to-date doctrine on deception. The current Field Manual 90-2, entitled Tactical Deception, covers everything from small unit level deception techniques to strategic deception operations in its discussion and examples. The U.S. Army doctrinal capstone manual FM 100-5, Operations, identifies three levels of war: tactical, operational and strategic. Although the operational level is not new to warfare it is new to U.S. Army doctrine. In an effort to update the existing FM 90-2 to reflect this and other changes, the preliminary

draft of FM 90-2 entitled Battlefield Deception is currently being staffed throughout the Army. This manual does address the operational level of war; however, it includes both tactical and operational level deception under the single heading of "battlefield deception." FM 100-5 emphasizes that an integral part of any campaign plan is a deception plan.[2] But neither the current deception manual nor the proposed update includes a specific description of what is required nor how to plan and execute a deception in support of a campaign. With the resurgent emphasis on the operational level of war it is important that deception get a thorough review as an essential operational level combat multiplier distinct from tactical and strategic level deception operations.

The intent of this monograph is to identify some essential requirements for deception operations at the operational level and suggest some rudimentary doctrinal imperatives for the use of deception in support of a campaign. To accomplish this, three successful operational level deceptions from World War II have been analyzed: Sicily (Operation Husky), Ardennes (Wacht am Rhein) and Belorussia (Operation Bagration). This monograph contends that the experiences in these three campaigns provide valuable lessons for conducting operational level deception and that the U.S. Army can draw from these examples some imperatives for the conduct of successful campaign deception operations. These examples are dated in that they do not reflect the latest technology and equipment available to modern armies. They also do not include the methods and techniques employed in recent military operations. A major limiting factor in investigating more recent deception operations is the amount of information available on operations during the 1973 and later Middle East wars, the Soviet Afghan invasion or the recent U.S. Grenada intervention for example. Information regarding deception in support of large scale operations is especially sensitive, and therefore difficult to investigate in classified as well as open literature. Now that security restrictions have been lifted the information available from

World War II campaigns provides more depth and detail for the study of deception than reports on current operations. WWII operations are some of the best examples available illustrating the profound effect deception can have in support of a campaign. The study of this historical experience today will allow us to apply the lessons learned as we develop and update our doctrine.

The first portion of this paper will identify the aim of deception operations and discuss the differences between strategic, operational and tactical deception. It will also identify the challenges presented to the deception planner at the operational level. Following this background three deception studies will be presented highlighting key factors involved in those successful operations. Analysis will establish requirements essential to the conduct of these operations in order to answer the question: What are the requirements and doctrinal imperatives for the conduct of successful deception operations? Implications for current doctrine, training, organization and equipment will also be considered.

Deception and the Operational Level of War

Deception can be utilized at any of the three levels of war described in Field Manual 100-5 strategic, operational and tactical. This section will highlight similarities and differences between deception operations at each level of war. The focus will then shift specifically to the operational level in order to gain a perspective and establish requirements for successful deception operations as part of a campaign or major operation.

Deception has a common definition and purpose in all three levels of war. U.S. Army doctrine defines deception as: "Actions which mislead the enemy and induce him to do something counter to his interests. It includes manipulating, distorting, or falsifying information

available to the enemy to insure security to real plans, operations or activities." [3] Beyond this common definition there are some significant differences in deception used at the different levels of war. Strategic deception deals with major considerations such as: will a country fight; will it attack and when will these activities take place. Strategic deception tries to hide these intentions from a potential enemy. Political and diplomatic subterfuge and disinformation are the primary tools of strategic deception and are utilized in peacetime as well as in wartime. Operational deception on the other hand focuses on a specific campaign in a theatre of war. It attempts to protect the details of campaign execution or spread misinformation regarding the conduct of operations: where will they be, when will they begin, what forces will be used and how will they fight? The focus is on protecting large friendly units. The effort begins with mobilization and continues until the units are deployed on the battlefield. At the lower end of the combat spectrum is tactical deception. It deals with forces actually in contact and is largely an ad hoc excercise because it relies heavily on taking advantage of fleeting opportunities. It is sustained over a relatively short period of time and it has a limited well-defined mission with only local effects. However, it has potentially small pay off and could be disruptive if it is not coordinated with the operational plan.

With these general differences in mind let us focus on operational art and how deception supports it. FM 100-5 gives the following description of operational art:

> "Operational art is the employment of military forces to attain strategic goals in a theatre of war or theatre of operations through the design, organization and conduct of campaigns and major operations. A campaign is a series of joint actions designed to attain a strategic objective in a theatre of war.....Operational art thus involves fundamental decisions about when and where to fight and whether to accept or decline battle. Operational art

requires broad vision, the ability to anticipate, a careful understanding of the relationship between means and ends, and effective joint and combined cooperation."[4]

While this description is not all encompassing and does not serve as a complete "definition" it does present the following major challenges for deception operations.

a. Written guidance at the operational level is the campaign plan which provides the connection between means and ends. The deception plan must be an integral part of the campaign plan. It requires early, detailed planning and forethought prior to commencement of the campaign. Ad hoc deception created while the battle is in progress can be effective. However, deception at the operational level attempts to condition and prepare the enemy prior to the battle. The commander and his staff require a deliberate and concurrent planning effort to coordinate the deception plan with the operations plan. The deception plan should be developed concurrently with the operations plan at every level of war whenever possible.

b. A central theme at the operational level is the intellectual contest between opposing commanders, each supported by a significant intelligence effort, trying to influence the other in the positioning of main forces and reserves. At this level the commander must decide when, where and how he will concentrate his combat power against the enemy center of gravity. His intelligence organization must provide information that enables the commander to see the campaign (and battles) through the enemy's eyes. A successful deception operation protects the friendly commander's intent from the enemy's intelligence gathering sources and reinforces the enemy's expectations and preconceptions about the friendly force.

c. At the operational level the commander has to master the time and space over which planning and operations take place. The supporting deception plan must be maintained for weeks or months and the risk of discovery magnifies with time. Therefore, successful deception

requires a very high level of security.

d. An additional point concerns the scale of operational deception. Most operational level deception plans will involve the maneuver of large joint and combined forces. Because of this it is virtually impossible to support such a plan with resources dedicated solely to the deception plan. Operational level deception requires the involvement of the entire force as the deception plan and operations plan work side by side in the theatre.

It appears that operational level deception requires special attention in several areas. First, there is a significant planning effort required. The commander and his staff need to be well organized and excercise a high degree of centralized control and direction of the deception operation in support of the campaign. Second, intelligence support must be timely, and accurately predict the enemy's intentions and predelictions. Third, a comprehensive security effort is required to conceal the deception plan from the enemy. Factors of time and space will create vulnerabilities that require good security measures to protect against a compromise. Finally, operational level deception requires the involvement and use of the entire force. These may not represent all the requirements for a successful deception operation but they appear to be fundamentally important if deception is adequately to support the operational level of war. These points will be further developed in the analysis following the presentation of the three World War II historical cases. These cases do not represent a complete history of deception operations. Rather they provide a focus and a perspective as the basis for the discussion and analysis which follows.

Historical Perspective

Sicily, 10 July 1943: Operation Husky

British deception activities evolved from very modest beginnings in 1940 to what was

known in 1943 as "Force A", an organization which was to mystify and mislead the enemy in support of operations of British Forces in the Middle East. By 1943 the British were great believers in deception, which inspired a highly organized and focused effort to deceive the Axis about the intentions and plans of the Allies. "Force A" planned and executed deception plans on the battlefield in support of British and American forces which were potentially outnumbered by the Italian Army and their German allies.[5] Operation "Husky" was an amphibious assault, a very risky military operation. In order to counter their position of weakness the British "Force A" resorted to guile and cunning in a classic deception plan in support of the operation.

Despite nearly fifty advance warnings of the Allied landings on Sicily the German high command (OKW) and the German intelligence service, the Abwehr, were still confused. The local commanders, Mussolini and Field-Marshall Kesselring, thought the primary target would indeed be Sicily, but Hitler was not convinced and continued (until thirteen days after the landing) to wait for landings in Sardinia and Greece. The Luftwaffe, not trusting the Abwehr assessment, also believed Sardinia was the target and concentrated forces there. The German failure to reinforce their Sicilian defenses was not a matter of an unlucky guess. Rather, they had succumbed to a well-coordinated, multi-faceted deception plan.[6]

The general deception scheme was Plan Barclay, which employed various means to present southern France and the Balkans as the "cover targets" for Sicily. Barclay included attaching Greek interpreters to battalions of the Sicilian expeditionary force amidst an obvious fanfare of "secrecy." A major diversion was the highly visible west-to-east movement of "Force H"-a large British naval task force with battleships, carriers and destroyers-on July1 through the Sicilian narrows. "Force H" then operated near Crete in conjunction with diversionary commando raids there. A special part of the Barclay deception was operation "Animals", a British special operating forces activity creating a partisan diversion in Greece.[7]

It was during Husky that the British conducted one of the most famous "one of a kind" ruses of World War II- Operation Mincemeat. It comprised the delivery of one intelligence service courier, "Major Martin," who was allegedly drowned after an air accident. It was in fact a cadaver complete with faked papers indicating Sardinia or Greece as the target. The "Major" was deposited by a British submarine off the coast of Spain where Spanish intelligence found him and the papers and handed them over to the German intelligence service. The planted intelligence was judged authentic reflected by orders issued by the OKW for defense priorities in Sardinia and the Peloponnesus.[8]

The planning group sent to General Eisenhower for the planning of Husky requested that the London Controlling Section (LCS) prepare and conduct a central strategic deception operation to help cover the landings in Sicily. Mincemeat was one of the ruses developed in response to this request. The LCS, an interdepartmental deception section working directly under the British Chiefs of Staff, planned and directed the entire Mincemeat operation.[9]

These operations succeeded in that the Germans sent one division to Sardinia, two airborne divisions to southern France to protect Sardinia and one tank division from France to Greece. From 10 March to10 July 1943 the Germans sent some ten divisions to the Balkans.[10] Hitler was so convinced of an Allied invasion of the Balkans that as late as 23 August Field-Marshall Rommel was made Commander -in -Chief Southeast and sent to Greece. The Abwehr also concluded that the Balkans was the target. The Germans believed all along that strategically the Balkans was the most logical place for a landing due to the oilfields and the possibility of a link-up with the Russians on the Eastern front. Plan Barclay played cleverly on those preconceptions, subtly reinforcing the German self deception.

Plan Barclay and its associated subordinate plans worked so well that the Italian and German intelligence summaries estimated fifty Allied divisions and 10,000 aircraft were in the

Mediterranean. (In fact there were only about half that number.) Given these numbers they also suspected the possibility of simultaneous landings in Greece, Italy or southern France. It was not until September with the invasion of the Italian mainland that the Germans realized that the landings in Italy were to be the only ones that year.[11]

The campaign in Sicily was eventually won because of superior forces concentrated in an area of relative enemy weakness. A major reason for this success has to be attributed to the ambitous and clever deception story which successfully covered the real operation and led the Germans to disperse their forces against only notional threats.

Ardennes, 16 December 1944: Operation Wacht-Am-Rhine

After the Allied invasion of Europe, and with the Russians pushing westwards on the eastern front, the Germans had been forced on the defensive. Hitler believed that by fighting rather than waiting he could still defeat the Alliance and save Germany. At Hitler's direction in the late summer of 1944 the German General Staff studied options for victory in a major decisive campaign. The decision was made to attack on the western front to break through the Allied defenses and eventually sieze the port of Antwerp. The Germans were able to mass nearly 300,000 troops virtually under the noses of the Allies without their knowledge and launch their offensive on 16 December. They broke a 45 mile wide gap in the defensive line achieving overwhelming surprise against the thinly held defenses. Even though the Allies had numerous warnings of the German build-up and the impending attack they failed to take action to counter the threat. They were the victims of a well-conceived and skillfully executed deception effort by Hitler and OKW, code named "Wacht am Rhein."[12]

The "Wacht-Am-Rhine" was a model of effective security. Hitler personally directed the

effort using a small staff of trusted senior officers. His intentions and the basic plan remained a secret to all others including the Commander-in-Chief West, Field Marshall von Runstedt and field commanders of the 5th and 6th Panzer Armies who would conduct the offensive. All persons with knowledge of the plan were required to take special written oaths. All orders and planning documents relating to the offensive were hand carried by special courier or passed by word of mouth. The use of radio communication was expressly forbidden. Personnel knowledgeable of the plan were forbidden to fly west of the Rhein to avoid a repeat of the 1940, "Lucifer Affair".[13] Units who were to participate in the initial phases of the operation were moved under cover of darkness or in periods of low visibility. The Germans achieved security for the offensive through these and other elaborate plans and preparations.[14]

The deception story was logical, realistic and appropriate. It was readily accepted by the German field commanders as well as their Allied counterparts-General Eisenhower, General Bradley and Field Marshall Montgomery. The "Wacht-Am-Rhein" fit neatly into what was perceived as the best course of action for the Germans: The establishment of a defense along the Rhine River to protect at all costs the Ruhr, the industrial heartland of Germany. The massing of logistics and movement of divisions in and around the front line were considered logical steps to the defensive build-up between Cologne and Bonn. This story also gave credence to the supposedly weak and battle weary forces occupying defensive positions in the Eifel forest to prevent an Allied penetration in that sector. In truth this "battle weary" force would be the main attack.[15]

The deception gained additional credence when Allied intelligence learned that Field Marshall von Runstedt had assumed command of OB West. He was known to Allied intelligence as a logical and sound commander. It was expected he would take a conservative approach and not risk a foolhardy offensive. What Allied intelligence failed to realize was that Hitler, not

Runstedt, was the master mind of the operation. They may have been right about how Runstedt would react, but Hitler should have been the target of their assessment.[16]

Among the many means used by the Germans to support their deception effort was the infamous Operation Greif in which platoon size groups of special commandos disguised themselves in American uniforms, spoke English and used American equipment and tanks. They infiltrated American positions and caused confusion as rumors of large scale guerilla operations circulated through intelligence channels.[17] The success of Operation Greif was limited however. The plan was conceived late in the preparatory phases of operation and deception planning. This late start limited the number of troops and amount of equipment that could be assembled.[18]

The intent of the operation was to seize key bridges over the Meuse with raiding parties dressed and equipped as American soldiers. They would also conduct raids to disrupt and confuse operations in the Allied rear. The total force was about 1,500 men. A lack of English speaking soldiers and failure to acquire adequate captured Allied equipment limited their capabilities. It was an imaginative and potentially effective scheme but poor planning and coordination prevented greater success.[19]

The deception effort supporting the Ardennes offensive has gone down in history as a classic example of the use of deception to gain an advantage over an enemy. The Wacht-Am-Rhein scheme allowed the Germans to achieve surprise and mass to strike a near disastrous blow against the Allies. Although Hitler's "Wacht-Am-Rhein" was a brilliant plan executed with great precision and daring the deception alone could not carry the battle. Ultimately the counter-offensive in the Ardennes failed because the German Army and Air Forces lacked the men and materiel to exploit the advantage gained by their brilliant deception operation.

Belorussia: 22 June 1944: Operation Bagration

The Belorussian Campaign was the highwater mark for Soviet deception in WWII. At the beginning of the year, the Soviets had the initiative and could plan an entire campaign for the summer of 1944. By late April the General Staff had an ambitious plan for offensive operations across the entire theatre from the Baltic to the Barents Sea. The overall campaign would develop from north to south with the main effort, in the center in Belorussia, codenamed Operation Bagration. The General Staff considered surprise essential and developed a theatre-wide deception plan to support the campaign.[20]

The following account of the situation was given by General of the Army Shtemenko:

> "Our General Staff wanted somehow to convince the Nazi Command that in the summer of 1944 the Soviet Army's main blow would be delivered in the South and Baltic areas. As early as May 3, the Commander of the Third Ukrainean Front was given the following order: "To misinform the enemy, you are to carry out operational camouflage measures. It is necessary to show beyond the front's right flank the concentration of 8-9 divisions reinforced with tanks and artillery.....The sham concentration area to be simulated by showing the movement and location of separate groups of men, vehicles, tanks, guns, and engineer equipment in the area;.....By observation and aerial photography check, visibility and truthfulness of the simulated objectives."[21]

The Soviets emphasized several key factors in their deception. First, the Soviet deception plan was surrounded by extremely tight security from the top down. The operations order (and the deception plan to support it) were issued in single hand-delivered copies and allegedly only six persons were aware of the entire plan.[22]

Secondly, the Soviet intelligence service determined that the Germans continued to believe the major threats of the front were in the south in the Ukraine,and the north in the Baltic. The deception plan would reinforce their preconceptions.[23] All the physical signs of deployed armies were used including dummy tanks, artillery, aircraft, supply depots, field fortifications and radio nets. Who also concentrated the bulk of their long-range bombers to the south and established a real anti-aircraft zone with full fighter coverage.[24] The Germans played right into the Soviet plan by moving their Central Army Group reserve to the south.

Third, elaborate steps were taken to conceal the offensive build-up on the Belorussian Front (the main effort). Extensive camouflage preparations, night movement and radio silence were all stressed. What activity could be seen or heard was to be defensive in nature. Field fortifications, reconnaissance, limited artillery fire, and radio traffic all indicated a defensive posture in Belorussia. Just prior to the 22 June offensive the Belorussian front was authorized to prepare for the attack and begin reconnaissance in force. So as not to reveal these preparations for the real attack the General Staff also ordered adjacent fronts to conduct similar activities.[25]

Fourth, rather than using the same start time for all elements, the Russians staggered their attacks to give the appearance of isolated actions. The Baltic front attacked first on 22 June preceded by a major feint toward Finland on 12 June. Then the Second and Third Belorussian Fronts attacked on 23 June followed by the main attack (First Belorussian Front) in the center.[26]

The Germans picked up numerous warning signs that an offensive was being prepared. However, conflicting information generated by the deception plan coupled with Hitler's insistence that the main effort would be in the south effectively crippled any effort to produce an accurate intelligence picture. It was not until 28 June that the Germans realized the Soviets

were attempting a major breakthrough on the Belorussian Front.[27]

The typically overwhelming firepower, mass formations, and reserves played a major role in achieving a Russian breakthough. The Russians knew there was no way completely to hide such a massive operation. But they could deceive as to the time and the place of the major effort. The combination of the offensive supported by the deception operation was so effective that the Russians recaptured some 50,000 square miles and inflicted over 350,000 casualties by 18 July.[28]

Requirements for Operational Level Deception

The preceding examples have provided a perspective and a brief introduction to three World War II deception operations. The following analysis will focus on the requirements for planning, intelligence support, security and resources in order to arrive at imperatives for operational level deception.

Planning

Once the decision to deceive is made the deception planner must convert the decision, the deception objective and the deception story into a coherent directive to be followed by subordinate units. The planning process becomes the hub of all activity in support of the deception. At the operational level three considerations appear to be essential to a successful deception planning effort.

First the planning effort must be directed through a single organization for planning and supervision. General Hans von Greiffenberg, a German WWII deception planner summed up the requirement: "Any system of deception from which one may expect successful results requires

that there be an organization which not only plans the operation but also directs its implementation as a whole and sees to it that all measures which have to be taken are coordinated with each other and directed toward the common goal."[29]

After a variety of successes and failures at deception in the early war years , (especially by the Russians and British) the various armies realized they needed a special mechanism for planning and executing the myriad requirements involved in a complex deception as Grieffenberg has suggested. Deception was no longer a routine staff action. There was a desperate need for unity of effort in combining the deception plan with the operations plan using a different staffing approach. In each of the armies involved in these examples centralized direction and control was established using a formal or an ad hoc special staff. In general these special staffs were charged with planning of operational and tactical level deception operations and insuring the appropriate coordination of means and ends at the strategic, operational and tactical levels. They would also advise commanders, and devise and execute deceptions on behalf of the Army Group, Front or Army commanders. Finally they were to coordinate closely with all intelligence gathering assets including the special means available at the theatre or national level (special agents and ULTRA for example). It was through these special staffs that these armies gained centralized control and coordination of their efforts to deceive the enemy.

"Force A" referred to in the Operation Husky is an example of one such special planning staff. It was composed of some 57 officers and specialists. It was a "permanent" organization, based in the Mediterranean theatre established specifically to operate in that theatre and support the commanders in north Africa and Italy. "Force A" responded to directions from the London Controlling Section (LCS) for strategic coordination. They planned and directed the operational deception plan, "Barclay," and were also responsible for tactical plans like the "Force H" naval task force and the "Animals" operation in Greece.[30]

The Soviets used a somewhat different approach but established an effective system that achieved centralized control and direction. In fact it worked so well that many of the same techniques and methods are still used today.[31] STAVKA drew up the overall plan for the deception to support Bagration and assigned responsibilities and tasks to subordinate headquarters for their role in the deception. The Front and Army commanders utilized their chiefs of staff and ad hoc planning groups to direct and control their deception activities. These planners included many specialists such as intelligence experts, engineers, signalers, chemical corps and others. These commanders and their special staffs were responsible for planning and synchronizing the deception with the overall plan to include: objectives, means and methods, timing and control.[32]

The Germans also used the ad hoc staff approach in centralzed direction. They used deception effectively on numerous occasions: France, 1940; Russia, 1941 and in the Ardennes, 1944. These deceptions, however, were inspired by Hitler himself. There was no comparable German organization to "Force A." No central coordinating agency existed and each unit worked in isolation choosing to use deception when and if it desired. On a large scale, either Hitler organized it or there was no coordinated deception.[33] If Hitler chose to use deception, as he did in December 1944, then the plan was tightly controlled and centrally directed. For the Ardennes operation the German High Command (OKW) established the general deception picture. But Hitler alone controlled a small planning staff that overwatched the entire operation and fed the OKW the necessary information to task units and agencies in support of the deception.

A routine staff organization could be easily overwhelmed by the size and scope of the tasks to support deceptions like Bagration, Barclay and the Wacht-Am-Rhine. These organizations and techniques used by the Allies and the Germans established the necessary centralized control and direction effectively to plan a deception operation in support of a large unit operation.

A second major consideration in planning is that the deception plan complement and support the operations plan. The deception effort cannot stand alone. Coordination is essential with both plans aimed at the same objective. The deception plan needs to support the same sequence of events and activities that the real plan focuses on. In most cases the deception will involve not only false information and appearances but also real land, sea and air forces. It is essential those assets be disposed in theatre in such a way that they do not interfere with or divulge the real operation or expose the deception. In order to avoid conflicting plans detailed coordination should start early in the operational planning process and continue concurrently with operational planning.

As the coordinated planning effort establishes a tight link between the operations plan and the deception it will also ensure coordination between these plans at the strategic and tactical levels. Once again General von Greiffenberg provides a valuable perspective from his post WWII assessment of deception and cover plans:

> "Deception on a large scale cannot be limited to individual elements. All kinds of activity which in any way may serve the purpose of deception, whether in the military, political, economic or propagandistic field, must be brought into harmony with the over-all situation in order to mislead the enemy. The key to success lies in coordination of all subsidiary elements.[34]

The Russians accomplished this necessary coordination successfully in the preparation and execution of their operations and deception plans on the Russian Front in 1944. Planning for the operation and deception began as early as November 1943 at the Tehran Conference where the Allied leaders and staffs made initial contacts to coordinate their strategy between the Russian Front and the Normandy landings. The strategic deception efforts (by the British, Germans and

Russians) were planned to disguise the time, place and size of both offensives. The Russian deception effort continued to display a threat in the southern region (the Ukraine) and the Russians planned the deception for Operation Bagration to support that story. The deception story also included a notional link-up with the British and Americans after a Balkan invasion (also notional) by those forces. [35] (The British and Americans using "Force A" continued to convince Hitler that they intended some sort of an offensive through the Balkans and Hitler believed it was still a major threat).[36] This would hold in place on the Russian Front German units which might otherwise be used to oppose the Normandy invasions. Because of this cooperation and coordination between Allies the Germans were unable to determine the operational intent of the Allies and they never suspected a deception plan was being used. Both these factors were manifested by the complete surprise of the Germans and the maldistribution of their forces.

At the operational level the Bagration deception effort was a model of a well coordinated operation and deception plan. Operational planning and the complementary deception preparations were well underway by April 1944. The overall operational intent was to achieve a breakthrough in the center and penetrate the German defenses all the way to the city of Minsk. The deception story supported that objective by causing the Germans to shift their reserves south leaving the center weak for the main Russian attack. The heart of the plan considered the timing and sequencing of the attacks (both notional and real) as well as the forces to be used in the scheme. The deception took place over a 600 mile front and included eight different Front organizations, 2.5 million men and 166 divisions. The Russians undertook the largest concentration of forces in the Great Patriotic War in the area of the main effort: an Army group headquarters, four complete field armies and a tank army. The buildup took 75,000 railcars.[37] Additionally the variety of means used to conceal this massive buildup and portray an offenisve

threat on two other Fronts all complemented the overall operational plan. This commitment to operational deception by the Russian command holds a major lesson for the future, that the Soviets will study and learn from these experiences.

The Bagration deception plan also guided and directed tactical deception activities in order to carry out the details of the plan. A typical tactical coordination and control order can be found at Inclosure 5.

Earl F. Ziemke, a noted Russian and WWII historian commented that, "The maskirovka for Bagration was, *from top to bottom, the most throughly organized of the war.*"[38] He attributes much of the Russian success in this July 1944 operation to the meticulous planning and disciplined execution of their deception in coordination with their operations plans.

The third major consideration in planning concerns the aim or objective of planning which is a plausible deception story. The planner must ensure that every deception scheme and every deception measure is used in a realistic and natural way, and fits logically into the overall situation. The credibility of the story is further enhanced by several key factors: first, the story must be a logical, realistic course of action (often the best alternative course of action left after the selection of the "real" course of action.) Second, the story should focus on the enemy's expectations, preconceptions and fears. The size of forces and scope of activity (land, sea, and air) at the operational level make plausibility and realism difficult in constructing the deception story. However, operations like Sicily and the Ardennes indicate that it can be done successfully and that when it is done well it is a major factor in the success of the deception.

When the Allies agreed on Sicily as the site for the landings there still remained several other logical choices for invasion routes in the Mediterranean, to include Sardinia, southern France and the Balkans. The deception planners created notional threats in these areas to keep the possibilities alive in the minds of the Germans. Intelligence sources confirmed that Hitler's

greatest concern was the threat to the Balkans, so "Force A" focused on that fear and reinforced it using deception plans such as Mincemeat, Animals, and an elaborate notional order of battle. These activities provided the Germans with plausible Allied alternatives and successfully kept the Germans guessing as to the real strength and actual landing sites. Hitler was so convinced of the authenticity of these stories that he ordered two airborne divisions to south France, and a total of some 10 divisions to the Balkans between March and July 1943.[39] In addition Hitler reassigned (temporarily) Field Marshal Rommel as Commander-in-Chief of German forces in the Balkans area.[40]

Plausibility was also a major factor in the Ardennes deception. Although much of the German success at deceiving the Allies prior to the Ardennes offensive can be attributed to a major Allied intelligence failure , Hitler's deception effort was a masterful one largely due to its very natural, plausible story.

Hitler managed to paint a picture of the German Army in the West withdrawing to within its country's borders to prepare a defense of the homeland along the Rhein River. From this defensive notion came the codename "Wacht-Am-Rhxein" which was allowed freely to circulate among German troops as well as in Allied intelligence channels.[41] Hitler also fed security "leaks" in his system with orders and messages all referring to the "preparation for the anticipated enemy (Allied) offensive."[42] Hitler knew the Allies were preparing their next offensives to go north and south of the Ardennes. Consequently the area of the Ardennes was lightly held in an economy of force effort by the Allies. The Allied assessment was that there would be no German offensive anywhere, especially not through the difficult terrain of the Ardennes. This preconception was generally confirmed in the minds of British and American intelligence officers when the aging Field Marshall Gerd von Runstedt was recalled from retirement to become the Commander-in-Chief OB West. Allied intelligence experts viewed von

Runstedt as a conservative, traditional commander who under the circumstances (as the Allies interpreted them), would not attempt an offensive and certainly would not attack through the Ardennes. These activities coupled with a notional Army headquarters (the 25th Army) and the diversionary movements of the 6th Panzer Army in the Cologne area all served to present to the Allies a very real and believable story of a German defense on the Rhein River. Notwithstanding poor Allied intelligence, Hitler was able to mass 19 divisions; 300,000 troops; 2,000 tanks, and 2,000 aircraft opposite the Ardennes in December 1944. His initial successes gained through surprise of the unwary British and American soldiers can be attributed to a deception story that established a credible course of action, defense on the Rhein, and reinforced the Allied leaders preconception of a German Army not capable of a potent offensive.

Intelligence Support

> "Because of the scope and duration of campaigns and major operations, and the consequently broad range of enemy options, operational intelligence must attempt to probe the mind of the enemy commander. It must see the theatre through his eyes, visualize which courses of action are open to him and estimate which he is most likely to adopt.[43]

This quote from FM 100-5 describes the kind of support the deception plan relies on from the intelligence system. In order to have an effective deception plan and an effective counter-deception capability this unique perspective of the battlefield is a prerequisite. The decision to decieve can only be made after a through analysis and appreciation of the battlefield from the viewpoint of the enemy commander. In order to support the requirement for a plausible deception story an understanding of what the enemy commander knows about the

friendly forces and how he expects them to conduct the campaign or operation is necessary. The deception planner relies heavily on intelligence support to construct a plausible story aimed at taking advantage of the enemy commander's fears, assumptions and preconceptions of the friendly force and the situation. Intelligence support also plays a key role after the story has been developed. The intelligence system "attacks the target" of the deception by sending the deception story to the enemy using as many corroborating means as possible. The story is spread by "attacking" a wide array of enemy sensors and collectors. After the enemy has had time to recieve the story, process the information, make a decision and react, the intelligence system provides an assessment on the effects of the deception plan on the enemy. This feedback is essential and facilitates adjustments or changes to the operations plan as well as the deception plan. Without adequate intelligence support to "see" the enemy, to attack the target of the deception, and to assess the success of the deception, a successful deception operation would not be possible. Operation Husky provides an outstanding example of the critical contributions of an intelligence system in support of a deception plan.

Jopseph Browne in his study of deception in the Mediterranean campaigns points out that: "One of the principal reasons why Allied deception was so successful during World War II was that the Allies were able to play on Axis fears and preconceptions of Allied intentions, and they were able to follow the results of the notional story being fed and swallowed as bait by the Germans." [44] They accomplished this mainly through their intelligence system which included cryptanalytic capabilities, and agents and double agents, as the primary means of gathering information and planting misinformation. The British had compromised many of the German agents in the Mediterranean by 1943 and had penetrated the German Enigma code system earlier in the war. These two factors gave the Allies a tremendous advantage. They were able to monitor secret operational communications and determine German intentions and order of battle,

including disposition of forces, as well as monitor reports from intelligence stations to their headquarters using Enigma intecepts and compromised agents. Through these means they were able to discern Hitler's obsession with the threat to the Balkans and constructed the deception story to reinforce fear, all while the invasion force concentrated for the real attack against Sicily. "Force A" in collusion with the LCS directed the dissemination of the deception story through a variety of means and a multitude of collection sources. The intelligence system used double agents, "leaks" to newspaper correspondents, "rumors" in diplomatic channels, communications deception and false order-of-battle to plant the story. Coupled with real units, equipment and actual maneuver of ground, sea and airforces, "Force A" coordinated the "attack" and successfully sold the deception to the Germans. The feedback gathered by "Force A" through double agents and intercepted Enigma signals showed that the deception was working well. Joseph Browne's comments highlight that success: ".....(*The*) bogus Allied order of battle and its exaggeration of Allied strength which was fed to the Germans through the double agents was paying off. By 14 May the German High Command, in a signal to Kesselring was predicting large scale Allied landings in the east and western Mediterranean....From early May until mid-June all German estimates indicated Allied operations against Greece and the western Mediterranean, exactly the object of the deception plan."[45]

It is important to amplify one of the key contributions made by the intelligence system--First, the bogus order of battle. Without the help of these notional units and the threat they created in the mind of the Germans, the Allies would have had difficulty portraying the size and strength of forces necessary to cause the enemy to react. General Wavell once asked Dudley Clarke, the Chief of "Force A," what the worth of his organization was. Clarke answered, "Three divisions, one Armored Brigade and two squadrons of aircraft."[46] These were the forces the enemy (and some of the Allied staffs) had been deceived into thinking, through the bogus order of

battle, Wavell possessed in the Middle East. According to Clarke the first task of the deception staff was to construct the false order of battle and continue it from campaign to campaign. Success in operational level deception relies on the ability to persuade the enemy that strong friendly reserves are available, or that there is a threatening concentration building up for an attack, or that the friendly defense is stronger than it really is. In fact, Clarke believed that the false order of battle was the heart of deception in support of large formations since a "..... General can only influence the battle by the use of his reserves, so the Deception staff can only implement its planning by the employment of its notional forces." [47] Clarke accomplished "Barclay" and other deceptions in the Mediterranean with the help of a comprehensive bogus order of battle which he originated in 1942 and carried through the remainder of the war. Allied forces were overestimated as much as fifty percent during "Husky" thanks to the bogus order of battle used in conjunction with real forces and other deception means available.

Intelligence support was fundamental in support of Operation Husky. Signals intelligence (ULTRA) and double agents instructed the Allies on the enemy order of battle, helped them observe German reactions to the deception and monitored any redeployment of troops. From May through the July landings on Sicily the Allies knew the German strength on Sicily and they knew where the available reserves were positioned. Much to the credit of their intelligence support the Allies knew the deception had worked and they knew for at least a month before the landings they had dispersed the German divisions and would achieve operational surprise on Sicily.

Security

".....the basic principle of a successful deception operation against the enemy is complete concealment and security....." Colonel General Alfred

Jodl [48]

As soon as planning for the operational deception begins its secuity is at risk. There are many threats to the security of the plan, the most obvious of which is the extended time period over which the deception takes place. In Operation Bagration, for instance, the bulk of the army deployments took place in May and April but some of these forces were in position as early as February of 1944. The challenge to STAVKA and the field commanders was how to mask the deception during these months of movement and positioning.[49] The size of these forces presented an equally difficult challenge. There were 17 armies and 1.2 million front line troops and their associated equipment involved, many of which had a critical role in the deception.[50] How could they mask preparations of these proportions in order to maintain the security of the deception effort? Given the time factor and the size and scope of this effort there is significant coordination required to insure the operations plan and deception plan are closely linked as well as synchronized with similar plans at the strategic and tactical levels. How can that kind of planning and coordination take place without commanders and their staffs actively participating? The "secret" quickly becomes common knowledge and the possibility of compromise is greatly increased. In each of the examples used here there were security leaks and the enemy had warnings by taking advantage of these vulnerabilities. There really is no such thing as perfect security. But in each case security measures had protected the plan to the extent that surprise was achieved and the deception was a success.

In emphasizing the importance of security in military operations Winston Churchill commented that "In wartime, truth is so precious that she should always be attended by a bodyguard of lies."[51] His maxim takes a unique twist when applied to the security required for a deception plan. In fact one of the best ways to secure a deception plan is by surrounding it with the truth. The plausible, realistic deception plan can be its own best security. For example, the

Russian deception story for Operation Bagration was completely accepted by the Germans causing Hitler to reposition the Army Group Center reserve in the southern sector opposing the 1st Ukranian Front. Even though the Germans received numerous indicators of offensive activity in the Central Army Group sector they believed the main effort would still be in the south. In fact the deception was complete enough that on the day of the attack the Army Group Center commander, General Busch, was not present; he was in Berlin awaiting an appointment with Hitler.[52] In a similar instance during Operation Husky, the deception plan, Barclay, had convinced the Abwehr as early as April that the major Allied activity would be in the Balkans. Consequently when Navy Secretary Frank Knox was publicly quoted that Sicily would be the next target, the Germans were so preconditioned that Josef Goebbels (German Propaganda minister) noted: "We pay no attention to these.....attempts at camouflage."[53] In spite of these "leaks" and warnings security of the plan was maintained and the deception was successful.

Another technique used in each of these examples to secure the deception is strict limitation of the number of people with complete knowledge of the deception plan. The special staffs established by the Russians, the Germans, and the British facilitated a "close-hold" surrounding the entire plan and allowed them to control information and send only the required instructions to subordinate commanders and staffs. The Wacht-Am-Rhein is an excellent example of these tight security measures. Hitler directed his Chief of Operations, General Jodl, to work up the plan with a select group of officers and enlisted men. They took a loyalty oath that threatened the death penalty if they divulged any information to anyone outside the planning group.[54] The information squelch was so tight that even the Commander-in-Chief , OB West von Runstedt and his major subordinate commanders (Model and Manteuffel for instance) were brought in only as time, detailed planning and assembly of forces required.[55] It was not until the first and second week of December that these Generals and their corps and division

commanders were briefed on the plan with exact times, actions and objectives.[56] The Russians took similar actions in preparing for Bagration. Generals Zhukov and Vasilevskiy were personally charged with supervising the deception operation. Instructions were issued detailing only the actions necessary for the execution of the plan. The instructions referred to in the historical example and those in Appendix 5 typify the information passed to the field commanders. The entire plan, its purpose, objective and story were known only to Zhukov, Vasilevskiy and a select group of planners.

In several of these cases, further to protect the plan it was even necessary to "deceive" friendly leaders and soldiers. Hitler not only sold Allies the deception story of a strong defense on the Rhine River but many of his commanders up until the first weeks in December believed it and the soldiers never knew the whole story until the night before the attack.[57] An entry in the War diary of von Rundstedt's Headquarters, OB West, suggests how complete the deception was within the OB West. ".....there can be no doubt that the enemy will commit maximum strength and maximum material to force the breakthough to the Rhine. Our own defensive measures must be attuned to this.....Hence the Commander-in-Chief West will order the transfer of Sixth Panzer Army to the OB West theatre on 7 November....."[58] The British also used deception of friendly troops to protect plan Barclay. Through the use of rumors at the departure ports in the United Kingdom and United States the First Canadian Division and the 45th U.S. Infantry Division were "deceived" as to their actual destination; they were alledgedly going to the Balkans not Sicily. Troops in the theatre were also misled. They believed the Balkan deception story also. They were issued Greek maps, Greek currency and Greek phrase books which led them to believe their mission was in Greece not Sicily.[59]

How to maintain the security of a large scale deception operation was a challenge to the commanders and planners of WWII and remains a difficult task today. The Germans. Russians

and British all went to great lengths to insure the protection of the deception plan which did not insure its success, but without which the deception operation certainly would have been at risk. Deception and security go hand in hand and the experience of these three campaigns demonstrate the crucial link.

Resources

> "Good deception costs something. The expenditure of the means for deception must be in the right proportion to the purpose of the deception. If for example, the enemy is to be deceived into believing in the existence of an "army," a suitable number of staffs and troops and sufficient military equipment must be committed. Radio alone is not enough." General Hans von Greiffenberg[60]

Deception can be very resource intensive at the operational level and there are many arguments against the economy of large scale deception efforts in support of a campaign. The requirement to portray (really or notionally) the activities of corps, armies, naval battle groups, and their associated air support in a deception plan can easily discourage the deception effort. The possibility of successful operational deception is further confounded considering the variety and sophistication of reconnaissance and collection sources available to the enemy. It takes large conventional forces days and weeks to move about a theatre and they will routinely travel hundreds of miles. Practically, it does not seem possible that these large formations could go undetected. Historically, only scant resources dedicated solely to deception have been provided to armies in the field to cope with this challenge. Deception staff specialists, engineer camouflage units and special signal units are a few examples. These specialists and units

contribute to the deception but the task is far beyond their means. The deception at this level will often be a joint and even combined operation and it will utilize routine battlefield functions such as maneuver, fire support, sustainment and communications to portray a realistic and plausible story. Successful operational deception overcomes the liabilities of time and size of forces using technical and special means but most importantly it must consider the entire force and its actual battlefield functions.

The Russians attribute much of their deception in Bagration to this holistic approach:

> ".....one can and should use limited manpower and equipment to execute deception activities. The assigned troops should by their actions convince enemy intelligence that the deception measures they are carrying out are genuine. This can be achieved if enemy intelligence, observing phony troop actions, is able to establish operational-tactical densities, depth of columns, concentration and deployment areas,.....which are in conformity with actual standards and the prevailing situation."[61]

In order to confirm to the Germans that the southern wing near Kovel was the main offensive the Russians employed a variety of means. For example, they used standard tactics and techniques to confuse the enemy. Instead of reconnaissance in force only in front of the main effort, which served to tip off the enemy, they used their reconnaissance in numerous locations all along the front. Artillery preparations were also delivered in areas other than main objective areas further to confuse German intelligence. Sustainment activities were also simulated to aid the notional buildup. The 3d Ukranian Front simulated an entire Army rear area supported by four railway stations designated to simulate detraining of troops, supplies and equipment. Special engineer camouflage units were used to build mock storage sheds, dug outs and warehouses as well as emplace dummy tanks and weapons in motor pools and assembly

areas.[62] The Russians also used their air forces to simulate reconnaissance in the Kovel area. An actual air defense belt with real fighter coverage was established along with dummy airfields to add to the authenticity of the buildup. Looking at the picture, the Soviets truly involved the entire Russian Front to support the Belorussian offensive. Among these broad measures of disinformation were the instructions sent to the 3d Ukranian Front over 250 miles south of the main effort and to the 3d Baltic Front over 150 miles to the north. (See Inclosure 5) Each Front was to conduct displays and demonstrations to draw German attention away from the Belorussia buildup.[63] They would then participate in the June offensive as secondary attacks in support of Bagration. In their characteristic style the Russians appreciated the size and scope of the operation and did a masterful job of complementing that with a deception effort of a similar scale.

In each of these three operations the Russians, the British, and the Germans orchestrated their entire force into the deception effort. Their actual operations were planned and executed so that the deception story and the operations plan were mutually supporting. There were no separate formations of divisions, corps, armies, air or naval forces dedicated solely to deception support-no nation or army can afford that luxury. It was clear and imaginative employment of all these assets supported by the technical deception means that created an authentic operational picture for the target of the deception. These operational commanders understood the scale of the requirement and gained significant advantage over their opponents which would not have been possible using any lesser means.

Imperatives for Operational Level Deception

FM 100-5 lists ten imperatives to support Airland Battle. These imperatives do not

replace the principles of war or the four tenets of Airland Battle. Their purpose is to provide more specific guidance and enhance application of the principles and tenets. They are historically valid and necessary for success on the modern battlefield. The imperatives listed here apply to the employment of deception in support of an operation or campaign. The list is not all inclusive but based on previous assumptions, definitions and this analysis they are necessary for success in an operational deception.

a. Use a special staff for planning and to control and direct the deception plan and integrate deception with the operational plan.

b. Operational deception should not be improvised. Planning should begin early and it should be concurrent with operational plan development.

c. Operational deception must support the strategic deception aim and control and direct the tactical deception activities.

d. Deception planning must focus on developing a plausible, realistic plan within the resources available.

e. The deception plan should reinforce the preconceptions and predispositions of the enemy.

f. Security is essential to the deception plan. Limit the number of personnel involved. In some cases friendly forces will also be the object of friendly deception.

g. Accurate and timely intelligence support must "see the enemy" to determine the opposing commander's operational intent, determine his predispositions and preconceptions about friendly intent and determine the effects of the friendly deception plan.

h. The operational deception will in most cases involve the entire force in the theatre not just special or technical means. Consider the entire force when planning deception.

i. The preparation of special and technical material to support deception must be

accomplished in peacetime, prior to war, with appropriate security to protect the resulting capability.

Implications

Analysis has revealed some important requirements and imperatives for the execution of operational level deception. This section will consider the impact of these findings on doctrine, training, organization and equipment requirements.

From a doctrinal standpoint the prelimary draft of FM 90-2, Battlefield Deception, does focus on deception at echelons from theatre and below- the operational as well as tactical level. However, there is still a need to address those issues most critical to successful operational deception in order better to educate and train commanders and staff officers. There is not sufficient detail fully to comprehend and appreciate the nature of large scale operational deception.

FM 100-5 as well as FM 101-5-1, Operational Terms and Symbols should be updated emphasizing the inseparable link between the operations plan and deception at the operational level. The requirements for a well-coordinated, concurrent planning effort, integration of higher, lower and adjacent unit plans, and the total involvement of the forces in theatre should be central themes in our operational deception doctrine.

Joint and combined doctrine also need close attention. The requirement and necessity to use all the forces available in the deception operation requires a common understanding of definitions, methods and means to be employed. Perhaps the greatest challenge here is the necessity for this shared understanding in Allied partnerships such as NATO.

From a training standpoint, there is a definite lack of training available for commanders

and especially operational level staff officers. The author's recent experience in the Command and General Staff Officers Course (1986) and the School of Advanced Military Studies (1987) found that there was little deception training. Although deception is discussed and included in exercises the officers in these courses do not come away with a complete appreciation for the scope and magnitude of the deception effort or for its potential as a combat multiplier. There is also a noticeable lack of instruction regarding the Soviet emphasis on cover, camouflage and deception(maskirovka). The Soviets are masters of the deception art and U.S. commanders and staff officers need to understand their concept in detail. Instruction on Soviet operational art is sufficient but more emphasis needs to be placed on the Soviet's absolute commitment to the use of deception in support of all their operations.

In order to be proficient at operational deception all large unit exercises, theatre, corps,and division, should include friendly and opposing deception operations as an exercise training objective. On a recent (March 1987) NATO training exercise the author observed deception included as a part of the operations plan in a U.S. Corps. The deception effort, however, was not well integrated into the OPLAN and it did not receive emphasis as a primary training objective for the unit. Large unit training exercises are expensive in dollars and time, therefore they do not happen often. It is critical that when these training opportunities do occur, commanders and their staff take full advantage and include deception planning and execution in the list of critical tasks to be evaluated.

Several important organizational implications are evident as a result of this study. The U.S. Army is currently fielding division and corps battlefield deception cells (BDC) which will help the commander and the G3 establish the necessary direction and control for unity of effort in the execution of the operation and deception plans. But there is still one other element needed- a theatre level BDC. The theatre level BDC coordinates the tactical deception efforts by

the corps and divisions and ensures theatre support of operational and strategic deception aims. That critical link is missing. A theatre level BDC or similar force structure needs to be established to support planning and coordination of wartime and peacetime deception operations. Waiting for hostilities to establish such an organization will severely hamper the use of deception. The operational plan to deceive cannot be improvised. Planning and execution need to start early and the theatre BDC is the focal point for that effort.

In another organizational issue the U.S. Army currently has only one specialized unit dedicated solely to deception. History suggests that during wartime these units and their technical capabilities are necessary. These special units are equipped with a variety of visual, sonic and electronic means to aid in the deception. Their functions are largely technical but they are important to the overall scheme. These units should at least be present in mobilization Tables of Organization and Equipment (TOE) or perhaps in the reserve component if the U.S. Army intends to take advantage of their potential from the outset of any hostilities.

One final implication concerns that of equipment. The operational deception will need equipment with the capability to replicate large unit signatures: communications, visual, sonic, thermal and radar for example. Also, the equipment will be required in sufficient quantity and should be available from theatre level down. Much of the information about the types, quantities and disposition of this equipment is classified but some important questions come to mind for the commander and his staff: What equipment is available? Where is it located? How much is there? and, who is responsible for it? A review of the type and amount of equipment the Soviets used to simulate an "army" (Appendix 6) indicates why there is need for concern. No doubt the Russian effort is herculean and perhaps beyond the norm, but there must be a capability to use these techniques when necessary.

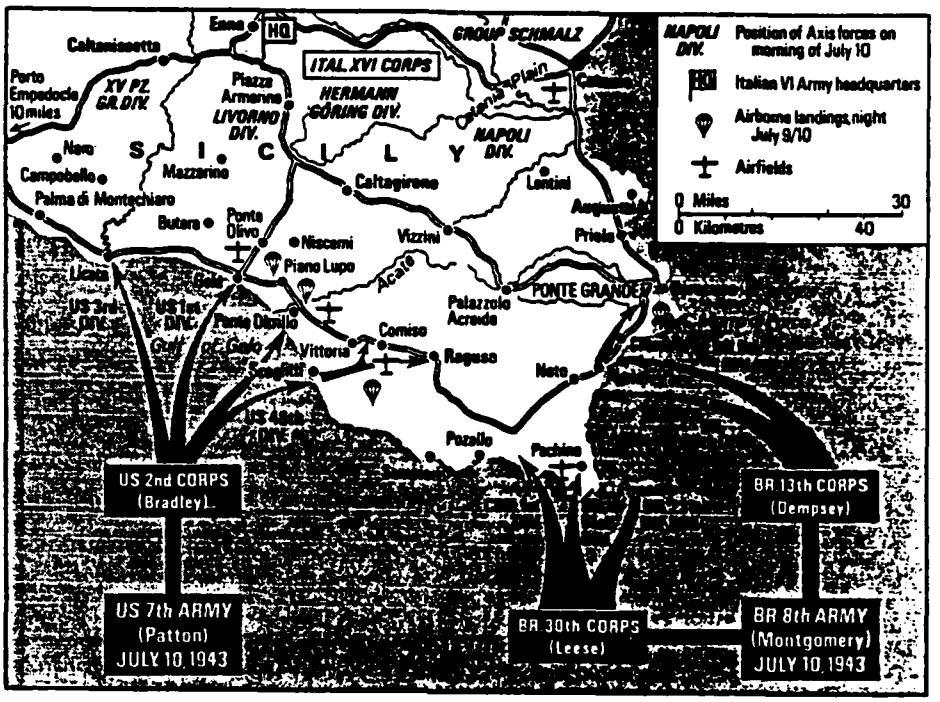
Conclusions

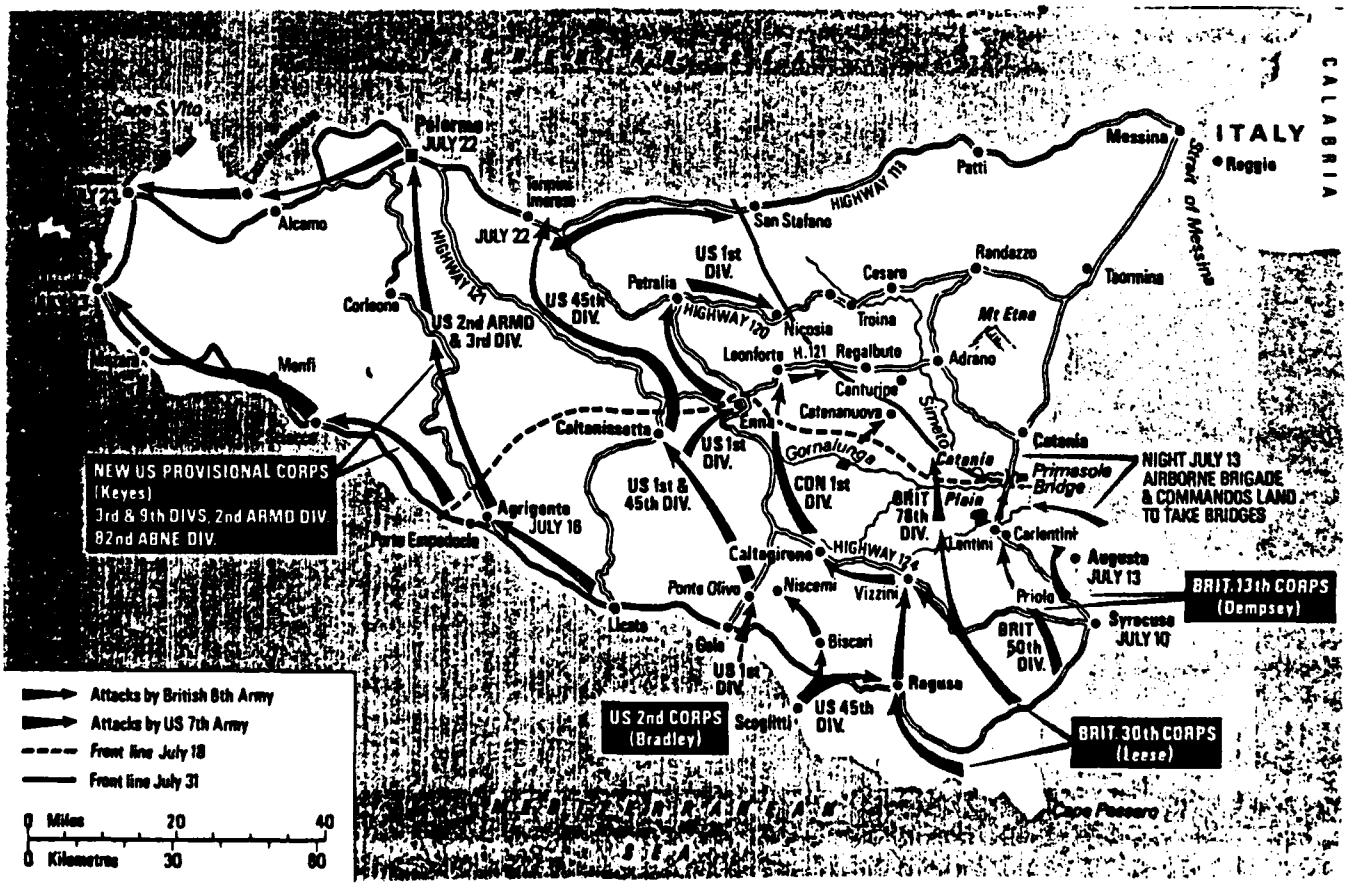
This monograph has considered deception at the operational level and highlighted four major requirements for a successful deception: planning, intelligence support, security and resources. In addition some doctrinal imperatives were suggested as a result of the analysis. Other factors are also important but these requirements and imperatives appear to be fundamental to the success of the deception and they provide some insight into the unique character of deception in support of a campaign. In order to master the art of deception at the operational level we must move out of the tactical mindset of division and corps operations. Tacatical level operations are short term, with limited aims achieved using limited means. The size and scope of operations and campaigns requires a more systematic approach to the application of means to ends. Employing large armies over hundreds of miles in a campaign that will last weeks or months requires a special perspective. The possibilities, and capabilities for deception in a campaign offer a new challenge for U.S. Army commanders today. Although we learned many lessons from WWII, Barton Whaley points out that we may have forgotten that valuable experience:

> "The history of strategem has been largely ignored since WWII-- strategem has come to be widely treated as the modern and arcane province of the intelligence services. It's original and most effective form is at the central and highest levels of the military planning process." [64]

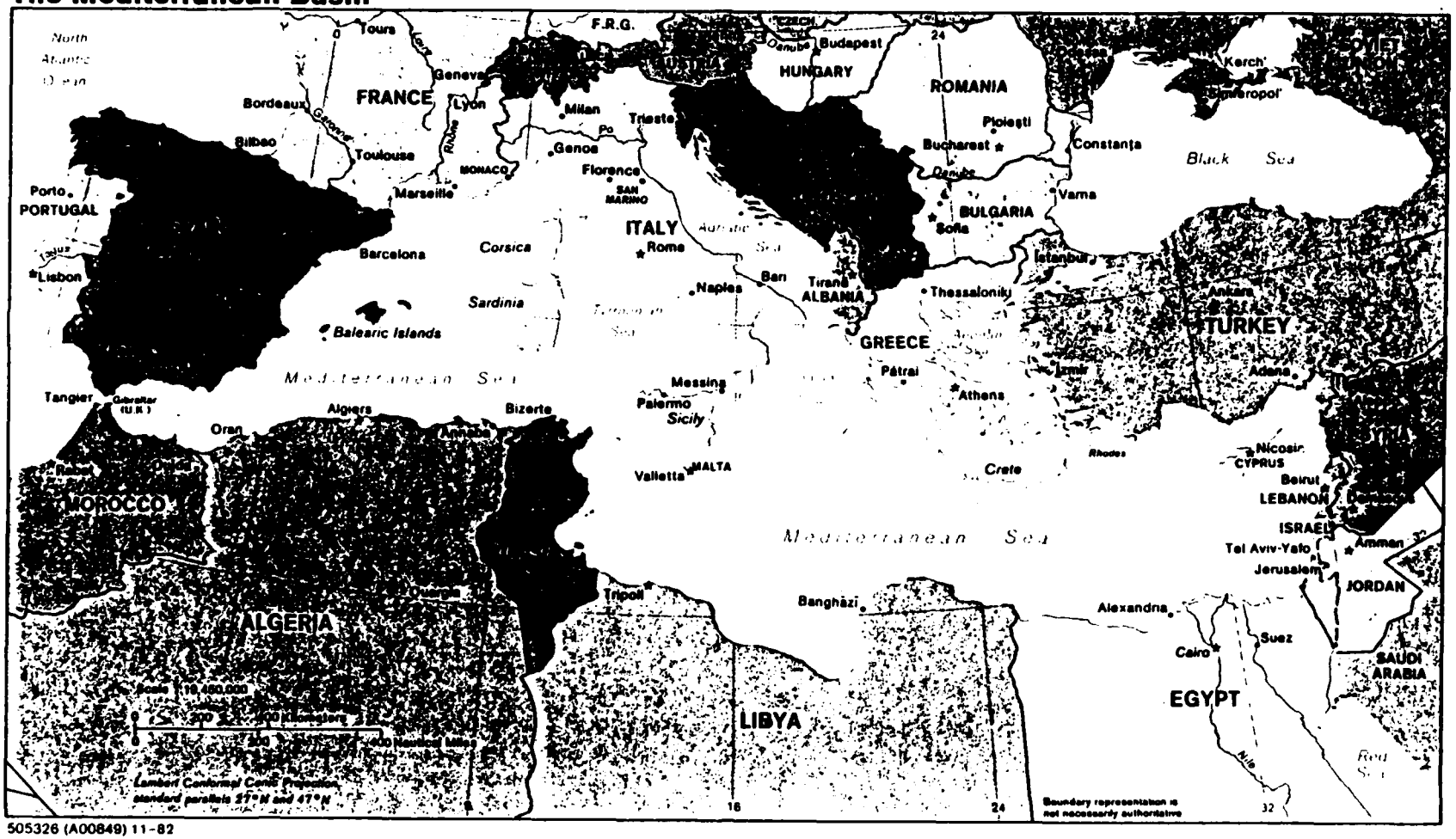
It is time to identify deception as an important operational level tool with unique requirements for successful execution. The requirements established in the analysis and the suggested doctrinal imperatives demonstrate a need for an operational level deception doctrine.

By the 1943-1944 time period the British, the Russians and the Germans had all gained a wealth of experience in the operational employment of large formations in a theatre of war. They had also learned the value of deception in support of their campaigns. They mastered the art of deception in operations such as Husky, Bagration and Wacht-am-Rhein. But these armies were not successful overnight in their attempts at large scale deception. None of them entered the war with the sophisticated plans, the special staffs and elaborate means they displayed in 1943-1944. Through long years of war they gained experience and confidence and a genuine zeal for the possibilities and potential of major deception operations. At this point in our history and doctrinal evolution it is important that we look at this experience and take advantage of the lessons learned. The next conflict whether a large scale war or a limited war will not allow for years of preparation and experience to relearn these lessons. We must have a viable operational level deception doctrine today.

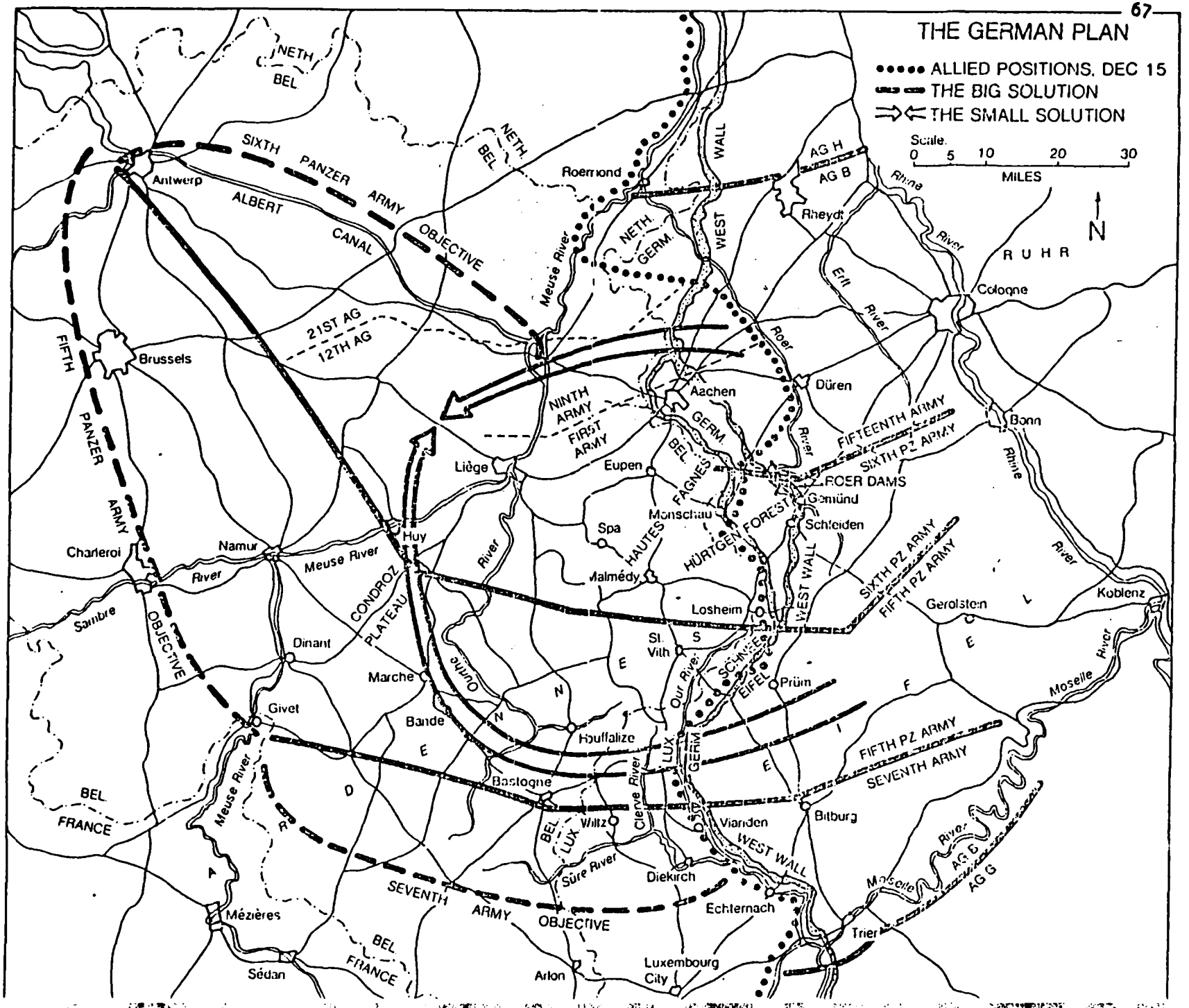

NAPOLI DIV. Position of Axis forces on morning of July 10
Italian VI Army headquarters
Airborne landings, night July 9/10
Airfields
0 Miles 30
0 Kilometres 40
HQ
Enna
Caltanissetta
GROUP SCHMALZ
ITAL. XVI CORPS
XV PZ. GR. DIV.
HERMANN GÖRING DIV.
LIVORNO DIV.
NAPOLI DIV.
Porto Empedocle 10 miles
Piazza Armerina
Gerbini Plain
Catania
Licata
Gela
Scoglitti
Vittoria
Comiso
Ragusa
Modica
Noto
Pozzallo
Pachino
Palazzolo Acreide
PONTE GRANDE
Lentini
Augusta
Priolo
Vizzini
Niscemi
Piano Lupo
Ponte Olivo
Butera
Mazzarino
Caltagirone
Acate
US 3rd DIV.
US 1st DIV.
US 45th DIV.
US 2nd CORPS (Bradley)
US 7th ARMY (Patton) JULY 10, 1943
BR. 30th CORPS (Leese)
BR. 13th CORPS (Dempsey)
BR 8th ARMY (Montgomery) JULY 10, 1943

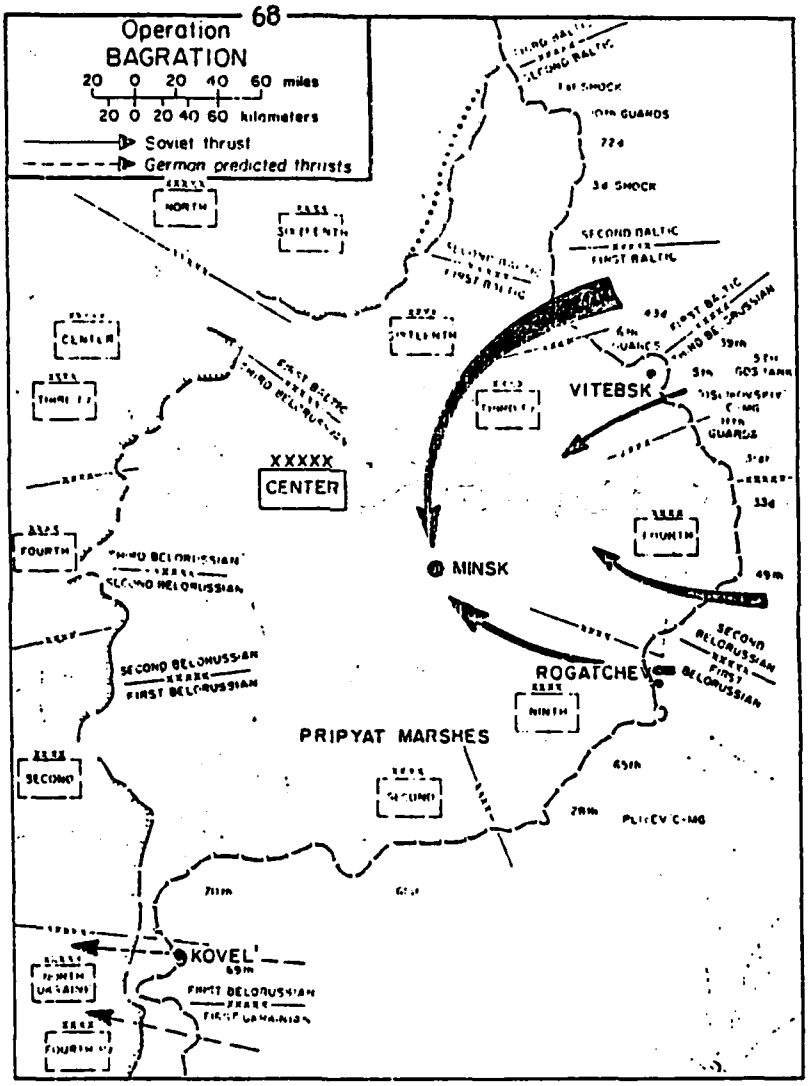

ITALY
CALABRIA
Reggio
Messina
Strait of Messina
Cape S. Vito
Palermo JULY 22
Trapani
Marsala
Alcamo
Corleone
Menfi
Sciacca
Porto Empedocle
Agrigento JULY 16
Licata
Gela
Scoglitti
Ponte Olivo
Caltagirone
Caltanissetta
Niscemi
Vizzini
Biscari
Ragusa
Modica
Pozzallo
Cape Passero
Augusta JULY 13
Syracuse JULY 10
Priolo
Lentini
Carlentini
Catania
Primasole Bridge
Catenanuova
Centuripe
Leonforte
Nicosia
Troina
Cesaro
Randazzo
Tbormina
Mt Etna
Adrano
Regalbuto
Petralia
San Stefano
Patti
JULY 22
HIGHWAY 113
HIGHWAY 121
HIGHWAY 120
HIGHWAY 124
Gornalunga
Simeto
Dittaino
US 2nd ARMD & 3rd DIV.
US 45th DIV.
US 1st DIV.
US 1st & 45th DIV.
CDN 1st DIV.
BRIT 78th DIV.
BRIT 50th DIV.
NEW US PROVISIONAL CORPS (Keyes)
3rd & 9th DIVS, 2nd ARMD DIV.
82nd ABNE DIV.
NIGHT JULY 13 AIRBORNE BRIGADE & COMMANDOS LAND TO TAKE BRIDGES
US 2nd CORPS (Bradley)
BRIT. 30th CORPS (Leese)
BRIT. 13th CORPS (Dempsey)
Attacks by British 8th Army
Attacks by US 7th Army
Front line July 18
Front line July 31
0 Miles 20 40
0 Kilometres 30 60

The Mediterranean Basin



505326 (A00849) 11-82


THE GERMAN PLAN
ALLIED POSITIONS, DEC 15
THE BIG SOLUTION
THE SMALL SOLUTION
Scale
0 5 10 20 30
MILES
N
NETH
BEL
SIXTH PANZER ARMY
ALBERT CANAL
OBJECTIVE
Antwerp
Roermond
WEST WALL
AG H
AG B
Rheydt
Rhine River
Erft River
RUHR
Cologne
Meuse River
NETH
GERM
21ST AG
12TH AG
FIFTH PANZER ARMY
Brussels
NINTH ARMY
FIRST ARMY
Aachen
Düren
Roer River
FIFTEENTH ARMY
SIXTH PZ ARMY
ROER DAMS
Bonn
Rhine River
Liège
Eupen
FAGNES
Gemünd
Monschau
Spa
HAUTES
HÜRTGEN FOREST
Schleiden
Huy
Charleroi
Namur
Meuse River
Malmédy
SIXTH PZ ARMY
FIFTH PZ ARMY
Koblenz
Losheim
Gerolstein
Sambre River
OBJECTIVE
CONDROZ PLATEAU
Ourthe River
St. Vith
Our River
SCHNEE EIFEL
Prüm
Moselle River
Dinant
Marche
Givet
Bande
Houffalize
Bastogne
LUX
GERM
FIFTH PZ ARMY
SEVENTH ARMY
BEL
FRANCE
Meuse River
Clerve River
Wiltz
Bitburg
Vianden
WEST WALL
Sûre River
Diekirch
Echternach
Mézières
SEVENTH ARMY OBJECTIVE
Trier
Moselle River
AG E
AG G
Sédan
Arlon
Luxembourg City



Operation Bagration.

1st Ukranian Front Deception Directive[69]

"Approved"

Document 1

Commander of 1st Ukrainian Front Mar SU Konev

Member of Military Council of 1st Ukrainian Front Lt Gen Kraynyukov

11 June 1944

Missions	Area Where Measures Conducted	Time Periods	Persons Responsible	Total Forces and Means	Note
1	2	3	4	5	6
/1st Cds Army/ Demonstrate a tank army concentration					
/18th Army/ Demonstrate a tank army concentration:	Vinograd, Kolomyya, Zabolotuv, Rudna Station	Beginning and end of work and demonstration by special order	Cmdr 18th Army	Rif bns:2 Engr bns:2 Arty batteries: 3 AAA regts:1 Tank co:1	Responsible staff officer of 1st Ukrainian Front Engr-Maj Momotov
a. Arrival and unloading of tanks on railroad			Chief of 18th Arm Engr Trps	Ftr avn flt:1 Radio co:1 Chem co: 1 Tank mock-up: 500 Vehicle mock-ups: 200 Gun mock-ups: 600 Train mock-ups: 2 Field Kitchen mock-ups: 100	
b. Tank movement to assembly area	Over roads Rudna Station		Cmdr of armd and mech trps of 18th Arm		

c. Occupation of initial areas	Locations for special ground recon	"	Chief of 18th Arm Engr Trps	Smokepots: 5,000 Sound units: 2 Tractors: 4 Vehicles: 15 Motorcycles: 10
d. Trp bivouacking	"	"	"	
e. Deception of local populace by special measures	In movement and concentration areas	" "	Chief of 18th Arm Engr Trps and cal department	200 persons of 23d uo(o?) (possibly) special sections directorate) of RGK (High Cmd Res)
f. Screening concentration from the air	"	"	18th Arm arty cmdr, cmdr of 10th iak (ftr corps)	
g. Radio deception	Army RBS (probably type of radio)	"	18th Arm sig officer	
h. Blanketing initial positions on day of attack	By special order	"	18th Arm chief of chem serv	

Chief of staff of 1st UF
(Ukrainian Front)
Arm Gen Sokolvskiy

Deputy commander and chief of engineer troops of 1st UF
Lt Gen Engr Trps Galitskiy

Document 2

"To carry out instructions and in conformity with the plan of the 1st Ukrainian Front commander.

I Order

1. Perform simulation of tank army concentration in vicinity of Vinograd, Kolomyya, Zobolotuv in the period from 4 through 20 July 1944.

2. For immediate direction of all simulation measures assign an operations group made up of the following: chief of operations group-deputy chief of army staff operations department Col Soloveykin, Col Stopog from engineer troops staff, Lt Col Yakovlev from artillery staff, Col Pisarikhin from staff of BT i MV (armored and mechanized troops), Lt Col Fiktor from communications department, Lt Col Shcherbak from political department, Engr-Maj Nikul'chenko from VOSO (military transportation) department, and Lt Col Barten'yev from the chemical department.

3. Subordinate operations group directly to army chief of staff and provide it with means of transportation from the 210 Motor Transport Platoon.

4. My deputy for engineer troops Col Comrade Zhurin is to ensure the building of 500 tank mock-ups, 200 vehicle mock-ups, 600 gun mock-ups, and 100 field kitchen mock-ups using resources of two engineer battalions and two rifle battalions from the 66th Guards Rifle Division by 20 July 1944, placing them in areas according to the plan.....

5. The artillery commander is to place three gun batteries on mechanical traction and one AAA regiment for screening assembly areas at the disposal of the chief of the operations group.

6. The commander of BT i MV is to place two batteries at the operations group chief's disposal from the 1448th sap (Self-Propelled Artillery Regiment) and five motorcycles for use in unloading and assembly areas.

7. Army signal officer Maj Gen Comrade Murav'yen is to arrange a dummy radio link according to the plan of the front signal officer for deception of the enemy, having the army RSB in Soroki and corps RSB's in the areas of Vinograd and Kobylets.

8. Political department chief Col Comrade Brezhnev is to place one MCU (powerful loudspeaker) sound broadcasting station at the disposal of the operations group chief and together with the chief of the army staff intelligence department organize deception of the local populace with respect to the concentration of major tank forces and offensive being prepared in the army sector. Use 15 officers for spreading false information among the populace.

9. VOSO chief Col Comrade Zelenin is to support through the front VOSO the measures being

carried out by rolling stock (a locomotive, 30 flatcars and 3 boxcars). Arrange the train's progress according to the schedule of the operations group chief.

10. My deputy for rear services Maj Gen Comrade Baranov is to support uninterrupted operation of motor transport for the entire period of the activities, releasing fuel on requisitions of the army chief of engineer troops with my approval.

11. Chief of the army chemical service is to provide blanketing in vicinity of Stefaneshti Station, Yasunuv Pol'ny Station, 1-2 km west of Dzurkuv and 1-2 km south of Venyava, assigning the chemical company of 66th Guards Rifle Division and 5,000 smoke pots for this purpose.

12. Engr-Maj Momotov, representative of 1st UF staff, provides consultation on matters of operational camouflagee, concealment and deception.

13. Report daily to operations group chief on progress of simulation work.....

Commander of 18th Army
Lt Gen Zhuravlev

Member of Military Council of 18th Army
Maj Gen Kolonlin

Chief of Staff of 18th Army
Lt Gen Ozerov

List of Personnel and Equipment Required[70]
To Portray a Soviet Tank Army
June 1944

2 Rifle Companies

2 Engineer Battalions

3 Artillery Batteries

1 Anti-aircraft Regiment

1 Tank Company

1 Fighter Aviation Flight

1 Radio Company

1 Chemical Company

500 Decoy Tanks

200 Decoy Vehicles

600 Decoy Artillery Pieces

2 Decoy Trains

100 Field Kitchen Mock-ups

5,000 Smoke Pots

2 Sound Units

4 Tractors

10 Motorcycles

15 Vehicles

Endnotes

1. Savoie, Thomas A. "Tactical Deception : A Lost Art?" (Monograph, School of Advanced Military Studies, Fort Leavenworth, Ks., December, 1986), p. 2.

2. U.S. Army Field Manual 100-5, Operations (Washington, D.C.: HQDA, May, 1986), p. 13.

3. U.S. Army Field Manual 100-5-1, Operational Terms and Symbols.(Washington, D.C.: HQDA, January, 1985), p. 1-36.

4. U.S. Army Field Manual 100-5, p. 10.

5. Browne, Joseph E. "Deception and the Mediterranean Campaigns of 1943-1944." (Research paper, USAWC Military Studies Program, Carlisle Barraks, Pa., March, 1986), p. 32.

6. Whaley, Barton. Strategem: Deception and Surprise in War. Cambridge, MA: Massachusetts Institute of Technology, 1969, p. 333.

7. Ibid. p.334.

8. Ibid. p. 332.

9. Ibid. p. 332.

10. Browne, p. 63.

11. Whaley, p. 335.

12. Dimsdale, Roger. "Deception Operation: An Historical Example- Have We Learned?" (National Defense University Strategic Study, The National War College, Washington , D.C., February, 1986), pp. 8-13.

13. Also referred to as the Mechelen Incident. D-day for the German Plan Gelb to invade the Allies thru Belgium and Holland was 17 January 1940. Hitler was pushing his staff for the offensive to begin when on 9 January a light plane crash occured with one of the officers aboard carrying the highly secret air plans to support the upcoming offensive. The officers and the plan fell into the hands of the Allies. Hitler was outraged at the carless breach of security. This incident was a major factor in the postponement of the German offensive until later in the year. See Alistar Horne, To Lose A Battle, pp. 160-161, 190.

14. Whaley, pp. 426-429.

15. Dimsdale, pp. 11-15.

16. Ibid. p. 14.

17. Whaley, p. 428.

18. Dimsdale, pp. 16-18.

19. Ibid. pp. 16-18.

20. Pirnie, Bruce R. "Soviet Deception Operations in World War II." (Research Paper, U.S. Army Center of Military History, Washington, D.C., August, 1985.) p. 8.

21. Boye, Earl J. "Cover and Deception in World War Two- Its Lessons and Doctrinal Implications" (Research Paper, Air Command and Staff College, Maxwell Airforce Base, Al., 1982.) p. 24.

22. Whaley, P. A393.

23. Pirnie, p. 11.

24. Whaley, p. A393 e-g.

25. Ibid. p. A 393 e-g.

26. Pirnie, p. 12.

27. Ibid. p. 12.

28. Boyle, p. 25.

29. Department of the Army, Chief of Military History. Deception and Cover Plans (MSS Nos. 044 a, b, c) Washington, D.C., May, 1952, p. 10.

30. Browne, Chapter 3.

31. Hamilton, David L. "Deception in Soviet Military Doctrine and Operations." (Master's Degree Thesis, Naval Post Graduate School, Monterey, CA., June, 1986.) Chapter 7.

32. Melnikov, P., Colonel-General. " Wartime Experience in Camouflage, Concealment and Deception." Voyenno-Istoricheskiy, Zhurnal No. 4 (in Russian) April, 1982, pp. 18-33. Translated in JPRS 81805, "USSR Report-Military Affairs" #1707, dated 20 September 1982.

33. Browne, p. 228.

34. Dept. of the Army, OCMH, MS Nos P-044 a. p. 86.

35. Daniel, Donald C. and Herbig, Katherine L. eds. Strategic Military Deception. New York: Pergamon Press, 1982, pp. 254-259.

36. Ibid. pp. 260-264.

37. Ibid. p. 259.

38. Ibid. p. 260.

39. Browne, p. 63.

40. Whaley, p. A334.

41. Mac Donald, Charles B. A Time For Trumpets. New York: William Morrow and Company, 1985, p. 28.

42. Ibid. p. 40.

43. FM 100-5, p. 30.

44. Browne, p. 64.

45. Ibid. p. 65.

46. Browne, p. 72.

47. Browne, p. 73.

48. Harris, William A. "Deception." (U.S. Army Military History Institute, Carlisle Barracks, PA. June, 1947, Notes from a lecture given at Fort Leavenworth) p. 5.

49. Whaley, p. A393, and Daniel and Herbig, pp. 258-259.

50. Ibid.

51. Whaley, p. 64.

52. Daniel and Herbig, p. 266.

53. Whaley, p. A334.

54. Mac Donald, p. 24.

55. Ibid. p. 24.

56. Ibid. p. 42.

57. Ibid. p. 48.

58. Ibid. p. 40.

59. Browne, pp. 107-108.

60. Dept. of the Army, OCMH, MS Nos. P044a, p. 85.

61. Shimansky, A. "About the Achievement of Strategic Surprise in Preparation for the 1944 Summer-Fall Campaign." Joint Publications Research Service, Department of Commerce, No. 467, August, 1968, p. 55.

62. Ibid. pp. 3-8.

63. Daniel and Herbig, p. 261.

64. Whaley, p. 231.

65. Blumenson, Martin. Sicily: Whose Victory? Ballantine Books, Random House, Inc., New York, New York, 1969, pp. 47 and 77.

66. National Foreign Assessment Center, Central Intelligence Agency- Map Library Division, Washington, D.C., Series and map no. 505326 (A00849) 11-82.

67. Mac Donald, pp. 30-31.

68. Daniel and Herbig, p. 259.

69. Melnikov, P. pp. 28-31.

70. Hamilton, p. 52.

BIBLIOGRAPHY

BOOKS

Blumenson, Martin. Sicily: Whose Victory? Ballantine Books, Random House, Inc., New York, New York, 1969.

Brown, Anthony Cave. Bodyguard of Lies. New York: Harper and Row, 1975.

Cruikshank, Charles. Deception in World War Two. New York: Oxford University Press, 1980.

Daniel, Donald C. and Herbig, Katherine L., eds. Strategic Military Deception. New York: Pergamon Press, 1982.

MacDonald, Charles B. A Time for Trumpets. New York: William Morrow and Company, 1985.

Masterman, J.C. The Double-Cross System. Ballantine Books, New York, New York, 1972.

Sun Tzu. The Art of War. Translated by Samuel B. Griffith. New York, New York: Oxford University Press, 1971.

Weigley, Russel F. Eisenhower's Lieutenants. Indiana University Press, Bloomington, Indiana, 1981.

Whaley, Barton. Strategem: Deception and Surprise in war. Cambridge, MA: MIT, 1969.

DOCUMENTS

Boyce, Earl J., "Cover and Deception in World War Two- Its Lessons and Doctrine Implications." Maxwell Air Force Base, AL.: Air Command and Staff College, 1982.

Browne, Joseph E. "Deception and the Mediterranean Campaigns of 1943-1944." USAWC Military Studies Program Paper, U.S. Army War College, Carlisle Barracks, PA, March 1986.

Crenshaw, Charles T. III. "Distinctions Between Tactical and Operational Levels of War." School of Advanced Military Studies Monograph, Fort Leavenworth, KS, May 1986.

Dimsdale, Roger. "Deception Operation: An Historical Example- Have We Learned?" National Defense University Strategic Study, The National War College, February 1986.

Department of the Army, Chief of Military History. Deception and Cover Plans (MS Nos. P-044 a,b,c), Washington,D.C., May 1952.

Hamilton, David L., "Deception in Soviet Military Doctrine and Operations." Master's thesis, Naval Post Graduate School, Monterey, CA. June, 1986.

Harris, William A. "Deception." U.S. Army Military History Institute Carlisle Barracks, PA, June, 1947.

Pirnie, Bruce R., "Soviet Deception Operations in World War II." U.S. Army Center of Military History, Washington, D.C., August, 1985.

Rios, Leon H., "The Linkage of the Strategic and Operational Levels of War." School of Advanced Military Studies Monograph, Fort Leavenworth, KS, May 1986.

Savoie, Thomas A., "Deception at the Operational Level of War." School of Advanced Military Studies Monograph, Fort Leavenworth, KS, 1986.

Savoie, Thomas A., "Tactical Deception: A Lost Art?" School of Advanced Military Studies Monograph, Fort Leavenworth, KS, December , 1985.

U.S. Army. Combined Arms Combat Development Activity. Field Circular 90-2, Deception Operations Planning Guide. Fort Leavenworth, KS, 1985.

U.S. Army Intelligence Center and School. Field Manual 90-2, Battlefield Deception Operations (Preliminary Draft). Fort Huachuca, AZ, July 1986.

U.S. Army. Field Manual 100-5, Operations. Washington, D.C., 1986.

U.S. Army. Field Manual 100-5-1, Operational Terms and Symbols. HQDA: Washington, D.C., January 1985.

U.S. Army. Field Manual 90-2, Tactical Deception. Washington, D.C., August, 1978.

U.S. Army. Field Manual 31-40. Tactical Cover and Deception. (U). HQDA: September, 1967.

U.S. Army Foreign Science and Technology Center. "Surprise, Cunning, Camouflage and Deception in the Soviet Army (Part II)." Charlottesville, Virginia, January, 1983.

U.S. Army Intelligence Center. "Interim Operational Concept for Battlefield Deception." Fort Huachuca, AZ, March 1986.

U.S. Army Material Systems Analysis Activity. "The Deceptive Practices of the 23rd Headquarters, Special Troops During World War II." Aberdeen Proving Ground, Maryland, January 1978.

ARTICLES

Dashevskiy, Ya., Lt. Gen Voyenno-Istoricheskiy Zhurnal No. 4 (in Russian), "Camouflage, Concealment, Deception: Organization and Execution." pp. 46-52. 24 March 1980.

Melnikov, P. Col. Gen. Voyenno-Istoricheskiy Zhurnal No.4 (in Russian), "Wartime Experience in Camouflage, Concealment and Deception." pp. 18-26. April 1982.

Shimanskiy, A. "About the Achievement of Strategic Surprise in Preparation for the 1944 Summer-Fall Campaign." Joint Publications Research Service, Department of Commerce, No. 467, August 1968.

Wilson, B.T. "Grand Tactics in Modern War." Military Review. June 1955, pp. 82-87.8

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